

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,815	06/26/2003	Francois Cottard	239098US0	2794
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET			EXAMINER	
			ELHILO, EISA B	
ALEXANDRIA,	, VA 22314		ART UNIT PAPER NUMBER	
			1751	,
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MON	THS	01/09/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)	- h
Office Action Summary		10/603,815	COTTARD ET AL.	
		Examiner	Art Unit	
	·	Eisa B. Elhilo	1751	
Period fo	The MAILING DATE of this communication app	ears on the cover sheet w	ith the correspondence address	
•	ORTENED STATUTORY PERIOD FOR REPLY	/ IS SET TO EXPIRE 3 N	MONTH(S) OR THIRTY (30) DAYS	3.
WHIC - Exter after - If NO - Failui Any r	CHEVER IS LONGER, FROM THE MAILING DA assions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period we re to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNI 36(a). In no event, however, may a vill apply and will expire SIX (6) MOI cause the application to become A	CATION. reply be timely filed  NTHS from the mailing date of this communication BANDONED (35 U.S.C. § 133).	
Status				
1)⊠	Responsive to communication(s) filed on 21 De	ecember 2006.		
. 2a)□	This action is <b>FINAL</b> . 2b)⊠ This	action is non-final.		
3)□	Since this application is in condition for allowar	•		S
	closed in accordance with the practice under E	x parte Quayle, 1935 C.L	). 11, 453 O.G. 213.	
Dispositi	on of Claims			
4)🖂	Claim(s) 1-33 is/are pending in the application.			•
	4a) Of the above claim(s) is/are withdraw	vn from consideration.		
•	Claim(s) is/are allowed.			
	Claim(s) <u>1-33</u> is/are rejected.			
	Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	r election requirement		•
·	•	·		
Applicati	on Papers		•	
	The specification is objected to by the Examine			
10)[	The drawing(s) filed on is/are: a) acce	• • • •	•	
	Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correct		• •	(d)
11)□	The oath or declaration is objected to by the Ex		• • •	ιu).
,	•	armior. Note the attache		
-	nder 35 U.S.C. § 119			
-	Acknowledgment is made of a claim for foreign ☑ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C.	§ 119(a)-(a) or (t).	
a) <sub>k</sub>	<ul><li>All b) Some c) None or.</li><li>1.  Certified copies of the priority documents</li></ul>	s have been received		
	2. Certified copies of the priority documents		Application No.	
	3. Copies of the certified copies of the prior		· ·	
	application from the International Bureau	ı (PCT Rule 17.2(a)).		
* S	ee the attached detailed Office action for a list	of the certified copies not	received.	
Attachment		, <b>.</b>	0	
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)		Summary (PTO-413) (s)/Mail Date	
3) Inform	nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	5) Notice of Other:	Informal Patent Application	

### **DETAILED ACTION**

- 1 This action is responsive to the amendment filed on December 21, 2006.
- A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/21/2006 has been entered.

## Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-23 and 25-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Casperson et al. (US 5,376,146) in view of Duffer et al. (US 2003/0028979 A1).

Casperson et al. (US' 146) teaches a composition comprising oxidation dyes (see col. 5, line 33), alkalizing agent of sodium silicate and alkanolamine of ethanolamine as claimed in claims 1-4 (see col. 5, lines 12-29), wherein the alkanolamine presents in the amount of 0.1 to 5% as claimed in claims 5-10 (see col. 5, line 31 and col. 11, Examples 1-40 composition No. 5), wherein the pH of the composition is in the ranges of 7 to 11 as claimed in claims 11-12 (see col. 5, line 10), wherein the oxidation dye is selected from oxidation bases of paraphenylenediamines as claimed in claims 13-15 (see col. 5, lines 40-41) and couplers of 1,3-phenylenediamines (meta-phenylenediamines) as claimed in claims 16 and 20 (see col. 7, lines 28-29), wherein the

oxidation bases and couplers are employed in the amounts of .0005% to about 5% which are fall within the claimed ranges as claimed in claims 19 and 21 (see col. col. 8, lines 30-34), wherein the addition acid salts are sulfates and hydrochlorides as claimed in claims 17-18 (see col. 6, lines 25-26), wherein the composition comprises organic solvents as claimed in claim 22 (see col. 9, line 25), wherein the organic solvents in the amounts of 0% to 5% which is overlapped with the claimed range as claimed in claim 23 (see col. 9, line 25), wherein the composition further comprises hydrogen peroxide as claimed in claims 25-26 (see col. 9, lines 52-53).

Casperson et al. (US' 146) also teaches a method for dyeing hair comprising applying to the hair the dyeing composition as described above and wherein the composition is remained for a period of time after which the composition is washed from the hair as claimed in claims 27-30 (see col. 10, lines 50-66).

The instant claims differ from the reference by reciting a composition comprising alkalinizing agent of metasilicates.

Duffer et al. (US' 979 A1) in analogous art of hair dyeing formulation, teaches a composition comprising alkalizing agents of sodium metasilicate and sodium silicate (see page 3, paragraph, 0039).

Therefore, in view of teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of Casperson et al. (US' 146) by replacing the alkalizing silicate with the alkalizing metasilicate as taught by Duffer et (US' 979 A1) to arrive at the claimed invention. Such a modification would be obvious because Casperson as a primary reference suggests the use of alkalizing agent of silicate in the composition. Duffer et al. as a secondary reference clearly teaches the equivalence

of alkalizing agents of silicates and metasilicates and their mixture in the composition, and, thus, the person of ordinary skill in the art would be motivated to replace the silicates in the composition of Casperson with the metasilicates as taught by Duffer with reasonable expectation of success to arrive at the claimed invention and would expect such composition to have similar properties as those claimed, absent unexpected results.

With respect to claims 31-33, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate a composition comprising metasilicates and alkanolamines in the claimed ration, because Duffer et al. (US' 979 A1) clearly teaches a mixture of alkalizing agents that include metasilicates and alkanolamine in the amounts of 1-5% which within the claimed amounts for imparting alkalinity (see page 3, paragraph, 0039), and, thus, a person of the ordinary skill in the art would be motivated to optimize the ratio between these alkalizing agents with a reasonable expectation of success for imparting alkalinity of the composition, and would expect such a composition to have similar properties to those claimed, absent unexpected results.

4 Claims 1, 3-4, 11, 13-16, 19-22 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dias et al. (US 6,004,355) in view of Duffer et al. (US 2003/0028979 A1).

Dias et al. (US' 355) teaches a hair dyeing composition comprising oxidation dyes of para-phenylenediamines in the amount of 0.24% which is within the claimed range as claimed in claims 1, 13-15 and 19 (see col. 32, Example I), buffering (alkalizing) agent of monoethanolamine as claimed in claims 3-4 (see col.22, line 27), magnesium silicate (see col. 31, lines 3-4), couplers of m-aminophenols in the amount of 0.06% which within the claimed range as claimed in claims 16, 20-21 (see col. 32, Example I), organic solvents as claimed in

claim 22 (see col. 25, lines 10-21), cationic polymers in the amount of 0.05 to 2% and nonionic surfactants in the amount of 1.5 wherein the amounts of the polymers and nonionic surfactants are within the claimed ranges as claimed in claim 24 (see col.30, lines 55-56, col. 31, line 22 and col. 32, Example I), wherein the composition also comprises oxidizing agent of hydrogen peroxide as claimed in claims 25-26 (see col. 22, lines 56-58), wherein the composition has a pH in the range of 7 to 10.5 which is within the claimed range as claimed in claim 11 (see col. 21, line 67).

The instant claims differ from the reference by reciting a composition comprising alkalinizing agent of metasilicates.

Duffer et al. (US' 979 A1) in analogous art of hair dyeing formulation, teaches a composition comprising alkalizing agents of sodium metasilicate and sodium silicate (see page 3, paragraph, 0039).

Therefore, in view of teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of Dias et al. (US' 335) by replacing the alkalizing silicate with the alkalizing metasilicate as taught by Duffer et (US' 979 A1) to arrive at the claimed invention. Such a modification would be obvious because Dias et al. as a primary reference suggests the use of alkalizing agent of silicate in the composition. Duffer et al. as a secondary reference clearly teaches the equivalence of alkalizing agents of silicates and metasilicates and their mixture in the composition, and, thus, the person of ordinary skill in the art would be motivated to replace the silicates in the composition of Dias et al. with the metasilicates as taught by Duffer with reasonable expectation of success to arrive at

the claimed invention and would expect such composition to have similar properties as those claimed, absent unexpected results.

## Response to Applicant's Arguments

5 With respect to the rejection of claims 1-23 and 25-33 under 35 U.S.C. 103(a) as being unpatentable over Casperson et al. (US' 146) in view of Duffer et al. (US' 979 A1), applicant argues that Casperson does not teach or suggest that alkalanolamines and organic or inorganic alkalizing agents can be used together or any benefits resulting from such a combination. Applicant also argues that Casperson neither teaches nor suggests the selection of at least one metaslicate and at least one alkalanolamine as claimed.

The examiner respectfully disagrees with the above arguments because Casperson et al. (US' 146) teaches that any compatible ammonia derivatives can be used as alkalizing agents and any other organic or inorganic alkalizing agents may also be used such as sodium silicate (see col. 5, lines 15-27). Further, Casperson clearly teaches that the preferred alkaline reagents are ammonium hydroxide, sodium carbonate and ethanolamine (see col. 5, lines 27-28). Therefore, there is a clear suggestion and sufficient motivation to one having ordinary skill in the art to be motivated to select any alkalizing agent including the claimed species to formulate such a composition to arrive at the claimed invention.

Further, with respect to the argument that Casperson neither teaches nor suggests the selection of at least one metaslicate and at least one alkalanolamine as claimed, and in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.

See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant further argues that the combination of Casperson and Duffer would not lead one skilled in the art to use both a metasilicate and an alkanolamine as is required by the presents invention. The examiner respectfully disagrees with the above argument because Casperson et al. as a primary reference clearly teaches a dyeing composition comprising alkalizing agents such as alkylaimes and sodium silicates (see col. 5, lines 15-28). Duffer et al. as a secondary reference clearly teaches that that dyeing composition contains one or more alkalizing agents such as alkanolaimes, sodium silicate and sodium metasilicate of the claimed species (see page 3, paragraph, 0039), and thus, Duffer et al. teaches the equivalence of alkalizing agents of silicates and metasilicates that can be used together with alkanolaimes. Therefore, there is a sufficient motivation to one having ordinary skill in the art to be motivated to replace the silicates in the composition of Casperson with the metasilicates as taught by Duffer to arrive at the claimed invention with the reasonable expectation of success for imparting alkalinity of the dyeing composition, absent unexpected results.

Furthermore, applicant argues that Dias et al. states that magnesium silicate can optionally be added to his compositions and does not teach or suggest that such a compound could be an alkalizing agent.

The examiner respectfully disagrees with the above argument because a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed.Cir.), *cert. denied*, 493 U.S. 975 (1989). In this case Dias et al. suggests the

use of silicate component in the dyeing composition, and thus, a person of the ordinary skill in the art would acknowledged that the dyeing composition may comprises silicate component no matter if the silicate component is used separately or with the combination of alkanolamine in the dyeing composition and would expect such a composition to have similar property to those claimed in the absent of contrary.

With respect to the applicant's arguments based on the improved beneficial properties associated with the claimed compositions such as good dyeing properties, improved sensory characteristics and homogeneous coloring. The examiner advises applicant to provide a comparative data or showing to demonstrate that the claimed composition has a superior and unexpected results over the composition of the closest prior art of record.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B. Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR Application/Control Number: 10/603,815

Art Unit: 1751

15 Page 9

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eisa Elhilo

Primary Examiner Art Unit 1751

January 5, 2007